

Remarks/Arguments:

Reconsideration of the application is requested.

Claims 1-6 remain in the application.

In item 4 on page 2 of the Office action, claims 1-6 have been rejected as being obvious over Ernam et al. (6,097,951) under 35 U.S.C. § 103. Applicant respectfully traverses.

Ernam et. al. (6 097 951) disclose a method and apparatus for scaling a wireless telecommunications network having an architecture based upon the subscriber distribution. The method includes providing a base station subsystem and a pool of mobile switching centers interconnected with one another. The mobile switching centers include visitor location registers. Lastly, a dispatcher mobile switching center is provided. The dispatcher mobile switching center is coupled between the base station subsystem and the pool of mobile switching centers for establishing communication between the base station subsystem and the pool of mobile switching centers. The dispatcher mobile switching center further provides for distributing mobile station subscribers and call related work among the pool of mobile switching centers.

Claim 1 defines a method for assigning geographically oriented units of a first hierarchical level of a radio communication system to geographically oriented units of at least one second hierarchical level that is higher than the first hierarchical level. The method includes steps of:

setting up functions that specify, as a function of a number of subscribers of a radio communication system, a size of a load, that is selected from the group consisting of a radio load and a switching load, and that is caused by a geographically oriented unit of a first hierarchical level at a node of the radio communication system;

setting up a formula which, using the functions, permits a size of a processing load occurring at each node, in a case of a given assignment of geographically oriented units of the first hierarchical level to geographically oriented units of the second hierarchical level, to be calculated for a given number of the subscribers; and

using the formula to select an assignment that permits a greatest possible growth in a number of subscribers of the radio communication system without a processing load at a geographically oriented unit of the second hierarchical level

exceeding resources of the geographically oriented unit of the second hierarchical level.

In summary, the claimed method involves using functions and a formula to select an assignment that permits a greatest possible growth in a number of subscribers of the radio communications systems. This is not disclosed or suggested by Ernam et al. (US 6,097,951). The claimed method describes how to optimize a network structure with calculated information, whereas, in contrast, Ernam et. al. describe the components of a mobile network and the interaction of these components. Ernam et al. describe an architecture for a mobile telecommunications system where subscribers are partitioned onto MSCs instead of using geographical partitioning. A router or dispatcher MSC is used for connecting a BSS to other MSCs over the A-interface (Col. 10, lines 51-55).

The steps defined in claim 1 are simply not taught or suggested in Ernam et al.

The Examiner has alleged that the step reciting, "setting up functions that specify, as a function of a number of subscribers of a radio communication system, a size of a load, that is selected from the group consisting of a radio load and a switching load, and that is caused by a geographically

oriented unit of a first hierarchical level at a node of the radio communication system" is disclosed in columns 1, 2, and 6, lines 7-41.

It is noted that columns 1 and 2 deal with the prior art and should not be combined with the inventive method taught therein, and column 6 simply teaches that when the mobile unit of a subscriber is powered up, the subscriber will be assigned to one of the MSC/VLR's according to a prescribed assignment (col. 6, lines 14-29). The first step recited in claim 1 is not taught or suggested.

The Examiner has also alleged that the step reciting, "setting up a formula which, using the functions, permits a size of a processing load occurring at each node, in a case of a given assignment of geographically oriented units of the first hierarchical level to geographically oriented units of the second hierarchical level, to be calculated for a given number of the subscribers" is disclosed in col. 6, lines 7-41, col. 7, lines 25-48, and col. 10, lines 40-67.

Column 6, lines 7-41 merely teach that when the mobile unit of a subscriber is powered up, the subscriber will be assigned to one of the MSC/VLR's according to a prescribed assignment (col. 6, lines 14-29) and that when the subscriber moves,

he/she will always be honed to the same MSC/VLR (column 6, lines 36-38).

Column 7, lines 25-48 merely teach that the subscribers are distributed onto several MSCs. There is a statement that this is performed based on relative loads and subscriber distribution and not on geography, however, there is no other teaching in this regard. Column 10, lines 40-47 relate to inter-MSC handovers and lines 48-67 summarize the overall concept of the scalable network. There is no teaching or suggestion relating to any kind of a formula for processing a processing load occurring at each node. There is also no teaching or suggestion relating to assigning geographically oriented units of a first hierarchical level to geographically oriented units of a second hierarchical level.

More particularly with regard to claim 1, there is no teaching or suggestion relating to setting up a formula which, using the functions, permits a size of a processing load occurring at each node, in a case of a given assignment of geographically oriented units of the first hierarchical level to geographically oriented units of the second hierarchical level, to be calculated for a given number of the subscribers.

The Examiner has also alleged that the step reciting, "using the formula to select an assignment that permits a greatest possible growth in a number of subscribers of the radio communication system without a processing load at a geographically oriented unit of the second hierarchical level exceeding resources of the geographically oriented unit of the second hierarchical level" is suggested at column 7, lines 25-48 and column 10, lines 48-58.

The cited passages at column 7, lines 25-48 and column 10, lines 48-58 have already been discussed. There is simply no teaching or suggestion for the step of claim 1, which has been referenced immediately above.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-6 are solicited.

Appl. No. 09/817,965.
Amdt. dated October 16, 2003
Reply to Office action of 6/19/2003

In the event the Examiner should still find any of the claims to be unpatentable, he is respectfully requested to telephone counsel so that, if possible, patentable language can be worked out.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$110.00 in accordance with Section 1.17 is enclosed herewith.

If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any other fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



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